AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims

1. (Currently Amended) A method of measuring an amount of an organic substance contained within a biological sample, said organic substance having an infrared absorption spectrum which includes a set (n) of wavelength regions, wherein ~~each of~~ up to n-1 of said wavelength regions each substantially correspond to an absorption band of said ~~absorption spectrum~~ organic substance and at least one of said wavelength regions corresponds to a reference wavelength band, comprising:

(a) calibrating a detection system with a reference sample;

(~~a~~b) detecting, with an optical sensor, the intensity of a number of selected wavelength bands of infrared electromagnetic radiation resulting from filtering of said infrared electromagnetic radiation influenced by said organic substance contained within said biological sample with [[a]] the detection system and generating an electrical signal in response thereto, wherein (i) ~~each~~ up to n-1 of said selected wavelength bands each substantially corresponds to ~~one of said wavelength regions~~ an absorption band of said organic substance and (ii) ~~said number of said~~ at least one of said selected wavelength bands is ~~equal to n-1 or less~~ a reference wavelength band;

~~(b) generating an electrical signal in response to detecting the intensity of said number of said selected wavelength bands;~~

(c) receiving said electrical signal with a signal processor configured to process said electrical signal with a quantification algorithm; and

(d) processing said electrical signal with said quantification ~~(d)~~ algorithm so as to provide a measurement of said amount of said organic substance contained with said biological sample.

2. (Currently Amended) The method of claim 1, including detecting the intensity of said selected wavelength bands of infrared electromagnetic radiation resulting from filtering said infrared electromagnetic radiation influenced by glucose with said detection system.

3. (Original) The method of claim 1, including collecting said biological sample from a mammal.

4. (Currently Amended) The method of claim 1, wherein:

said quantification algorithm of (c) includes dividing a first wavelength band integrated absorbance value by a reference wavelength band integrated absorbance value, wherein at least one reference wavelength band is contained in the wavelength regions in which said organic substance does not substantially absorb electromagnetic radiation.

5. (Original) The method of claim 4, wherein:

said quantification algorithm of (c) further includes dividing a second wavelength band integrated absorbance value by said reference wavelength band integrated absorbance value.

6. (Canceled)

7. (Canceled)

8. (Currently Amended) The method of claim 1, wherein:

said number of selected wavelength bands of (a) are within a range ~~The method~~ of claim 1 , wherein: defined by about ~~1400 cm^{-1} to about 950 cm^{-1}~~ 7 to 11 microns.

9. (Currently Amended) A method of measuring an amount of glucose in a biological fluid, wherein said glucose has an infrared absorption spectrum which includes a set (n) of infrared wavelength regions, wherein ~~each of~~ up to n-1 of said wavelength regions each substantially correspond to an absorption band of said ~~absorption spectrum~~ glucose and at least one of said wavelength regions corresponds to a reference wavelength band, comprising:

(a) calibrating a detection system with a reference sample;

(~~a~~b) detecting, with an optical sensor, the transmittance of a number of selected wavelength bands of infrared electromagnetic radiation resulting from said infrared electromagnetic radiation absorbed by said glucose contained within said biological fluid with [[a]] the detection system and generating an electrical signal in response thereto, wherein (i) ~~each~~ up to n-1 of said selected wavelength bands each substantially corresponds to ~~one of said wavelength regions~~ an absorption band of said biological fluid and (ii) ~~said number of~~ at least one of said selected wavelength bands is ~~equal to n-1 or less~~ a reference wavelength band;

~~(b) generating an electrical signal in response to detecting the transmittance of said infrared electromagnetic radiation;~~

(c) receiving said electrical signal with a signal processor configured to process said electrical signal with a quantification algorithm; and

(d) processing said electrical signal with said quantification algorithm so as to provide a measurement of said amount of said glucose contained within said biological fluid.

10. (Original) The method of claim 9, further comprising:

(e) collecting said biological fluid with a filtrate collector in fluid communication with a body fluid of a mammal.

11. (Original) The method of claim 10, wherein:

said mammal is a human.

12. (Currently Amended) The method of claim 9, wherein:

said quantification algorithm of (c) includes dividing a first wavelength band integrated absorbance value by a reference wavelength band integrated absorbance value, wherein the reference wavelength band is contained in the wavelength regions where the organic substance does not substantially absorb electromagnetic radiation.

13. (Original) The method of claim 9, wherein:

said quantification algorithm of (c) further includes dividing a second wavelength band integrated absorbance value by said reference wavelength band integrated absorbance value.

14. (Canceled)

15. (Canceled)

16. (Currently Amended) The method of claim 9, wherein:

said number of selected infrared wavelength bands of (ab) are within a range defined by about ~~1400 cm^{-1} to about 950 cm^{-1}~~ 7 to 11 microns.

17. (Currently Amended) A method of measuring a concentration of an organic substance contained within a biological fluid, said organic substance having an infrared absorption spectrum which includes a set (n) of infrared wavelength regions, wherein ~~each of~~ up to n-1 of said infrared wavelength regions each substantially correspond to an infrared absorption band of said ~~absorption spectrum~~ biological fluid and at least one of said wavelength regions corresponds to a reference wavelength band, comprising:

(a) calibrating a detection system with a reference sample;

(~~a~~b) detecting, with an optical sensor, the transmittance of a number of selected wavelength bands of infrared electromagnetic radiation resulting from filtering the infrared electromagnetic radiation absorbed by said organic substance contained within said biological fluid with [[a]] the detection system and generating an electrical signal in response thereto, wherein (i) ~~each~~ up to n-1 of said selected wavelength bands each substantially corresponds to ~~one of said wavelength regions~~ an absorption band of said biological fluid and (ii) ~~said number of~~ at least one of said selected wavelength bands is ~~equal to n-1 or less~~ a reference wavelength band;

~~(b) generating an electrical signal in response to detecting the transmittance of said selected infrared electromagnetic radiation wavelength bands;~~

(c) receiving said electrical signal with a signal processor configured to process said electrical signal with a mathematical model; and

(d) processing said electrical signal with said mathematical model so as to provide a measurement of the concentration of said organic substance contained within said biological fluid.

18. (Currently Amended) The method of claim 17, wherein:

(a) includes detecting the transmittance of said selected ~~electromagnetic radiation~~ wavelength bands of electromagnetic radiation absorbed by glucose contained within said biological fluid with said detection system.

19. (Currently Amended) The method of claim 18, wherein:

said mathematical model includes the mathematical equation includes mean-centered concentration of glucose in said biological fluid, the mean-centered concentration of glucose in said biological fluid being calculated with the equation:

$$C_g = P_o + P_1 IAR_{\lambda,1} + P_2 IAR^2_{\lambda,1}$$

wherein (i) C_g is the mean-centered concentration of glucose in said biological fluid, (ii) P_i is a calibration constant, and (iii) $IAR_{\lambda,1}$ is a mean-centered integrated absorbance ratio of two of said selected wavelength bands.

20. (Currently Amended) The method of claim 18, wherein:

said mathematical model includes the mathematical equation includes mean-centered concentration of glucose in said biological fluid, the mean-centered concentration of glucose in said biological fluid being calculated with the equation:

$$C_g = P_o + P_1 IA_{\lambda,1} + P_2 IA^2_{\lambda,1} + P_3 IA^2_{\lambda,1} + P_4 IA^2_{\lambda,2} + P_5 IA_{\lambda,1}$$

wherein (i) C_g is the mean centered concentration of glucose in said biological fluid, (ii) P_i are calibration constants, and (iii) $IA_{\lambda,1}$ and $IA_{\lambda,1}$ are the mean centered integrated absorbance for the selected wavelength band and the selected reference wavelength band.

21. (Currently Amended) The method of claim 18, wherein:

said mathematical model includes the mathematical equation includes mean-centered concentration of glucose in said biological fluid, the mean-centered concentration of glucose in said biological fluid being calculated with the equation:

~~$C_g = P_0 + P_1 IAR_{\lambda,1} + P_2 IAR_{\lambda,2} + P_3 IAR^2_{\lambda,1} + P_4 IAR^2_{\lambda,2} + P_5 IAR_{\lambda,1} IAR_{\lambda,2}$~~

$C_g = P_0 + P_1\ IA_{\lambda,1} + P_2\ IA_{\lambda,2} + P_3\ IA^2_{\lambda,1} + P_4\ IA^2_{\lambda,2} + P_5\ IA_{\lambda,1}\ IA_{\lambda,2}$

wherein (i) C_g is the mean-centered concentration of glucose in said biological fluid, (ii) P_i are calibration constants, and (iii) ~~$IAR_{\lambda,j}$~~ $IA_{\lambda,j}$ is a mean-centered integrated absorbance ratio of two of said selected wavelength bands.

22. (Currently Amended) The method of claim 18, wherein:

said mathematical model includes the mathematical equation includes mean-centered concentration of glucose in said biological fluid, the mean-centered concentration of glucose in said biological fluid being calculated with the equation:

~~$Cg = P_0 + P_1 IA_{\lambda,1} + P_2 IA_{\lambda,2} + P_3 IA_{\lambda,3} + P_4 IA^2_{\lambda,1} + P_5 IA^2_{\lambda,2} + P_6 IA^2_{\lambda,3} + P_7 IA^2_{\lambda,2} + P_8 IA_{\lambda,3} + P_9 IA_{\lambda,2} IA_{\lambda,3}$~~

$C_g = P_0 + P_1\ IA_{\lambda,1} + P_2\ IA_{\lambda,2} + P_3\ IA_{\lambda,3} + P_4\ IA^2_{\lambda,1} + P_5 IA^2_{\lambda,2} + P_6 IA^2_{\lambda,3} + P_7\ IA_{\lambda,1}\ IA_{\lambda,2} + P_8\ IA_{\lambda,2}\ IA_{\lambda,3} + P_9\ IA_{\lambda,1}\ IA_{\lambda,3}$

wherein (i) C_g is the mean centered concentration of glucose in said biological fluid, (ii) P_i are calibration constants, and (iii) $IA_{\lambda,j}$ is the mean centered integrated absorbance for band j.

23. (Currently Amended) A method of measuring an amount of an organic substance contained within a biological sample, said organic substance having an infrared absorption spectrum which includes a set (n) of wavelength regions, wherein ~~each of~~ up to n-1 of said wavelength regions each substantially correspond to an absorption band of said ~~absorption spectrum~~ organic substance and at least one of said wavelength regions corresponds to a reference wavelength band, comprising:

(a) illuminating said biological sample with infrared electromagnetic radiation, wherein said infrared electromagnetic radiation includes (i) one or more wavelength

bands of said infrared electromagnetic radiation ~~which are~~ resulting from filtering said infrared electromagnetic radiation absorbed by said organic substance contained within said biological sample (ii) one or more reference wavelength bands which are not substantially absorbed by said organic substance contained within said biological sample;

(b) selecting a number said wavelength bands of said infrared electromagnetic radiation, wherein (i) each of said selected wavelength bands substantially corresponds to one of said wavelength regions and (ii) said number of said selected wavelength bands is ~~a subset of (n)~~ n-1 or less;

(c) selecting a number of reference wavelength bands;

(d) optically detecting the intensity of only (i) said subset of said selected wavelength bands absorbed by said organic substance contained within said biological sample with a detection system and (ii) said number of reference wavelength bands;

(e) generating one or more electrical signals in response to detecting the intensity of only (i) said subset of said selected wavelength bands (ii) said number of reference wavelength bands;

(f) receiving said one or more electrical signals with a signal processor configured to process said electrical signals with a quantification algorithm; and

(g) processing said one or more electrical signals with said quantification algorithm so as to provide a measurement of said amount of said organic substance contained within said biological sample.

24. (Currently Amended) A method of measuring an amount of an organic substance contained within a biological sample, said organic substance having an infrared absorption spectrum which includes a set (n) of wavelength regions, wherein ~~each of~~ up to n-1 of said wavelength regions each substantially correspond to an absorption band of said ~~absorption spectrum~~ organic substance and at least one of said wavelength regions corresponds to a reference wavelength band, comprising:

(a) illuminating said biological sample with infrared electromagnetic radiation;

(b) optically detecting the intensity of said infrared electromagnetic radiation that is absorbed by said organic substance contained within said biological sample, wherein (i) said intensity detection is restricted to a number of selected wavelength bands of infrared electromagnetic radiation resulting from filtering the infrared electromagnetic radiation

absorbed by said organic substance, (ii) each of said selected wavelength bands substantially corresponds to one of said wavelength regions, and (iii) said number of said selected wavelength bands is a subset of (n) and generating one or more electrical signals in response to detecting the intensity of only (i) said subset of said selected wavelength bands (ii) said number of reference wavelength bands;

~~(c) generating one or more electrical signals in response to detecting the intensity of only (i) said subset of said selected wavelength bands (ii) said number of reference wavelength bands;~~

(~~d~~c) receiving said electrical signal with a signal processor configured to process said electrical signal with a quantification algorithm; and

(~~e~~d) processing said electrical signal with said quantification algorithm so as to provide a measurement of said amount of said organic substance contained within said biological sample.

25. (Currently Amended) The method of claim [[22]] 25, further comprising:

(~~f~~e) detecting the intensity of one or more reference wavelengths bands of said infrared electromagnetic radiation which are not absorbed by said organic substance contained within said biological sample,

wherein [[(c)]] generating said electrical signal includes generating said electrical signal in response to detecting the intensity of said one or more reference wavelength bands.

26. (Currently Amended) A method of measuring an amount of an organic substance contained within a sample, said organic substance having an infrared absorption spectrum which includes a set (n) of wavelength regions, wherein ~~each of~~ up to n-1 of said wavelength regions each substantially correspond to an absorption band of said ~~absorption spectrum~~ organic substance and at least one of said wavelength regions corresponds to a reference wavelength band, comprising:

(a) calibrating a detection system with a reference sample;

(b) illuminating said sample with infrared electromagnetic radiation, wherein said infrared electromagnetic radiation includes (i) one or more wavelength bands of said infrared electromagnetic radiation ~~which are~~ resulting from filtering said infrared electromagnetic radiation absorbed by said organic substance contained within said sample (ii) one or more reference wavelength bands which are substantially not absorbed by said organic substance contained within said sample;

(~~b~~c) selecting a number said wavelength bands of said infrared electromagnetic radiation, wherein (i) each of said selected wavelength bands substantially corresponds to one of said wavelength regions and (ii) said number of said selected wavelength bands is ~~a subset of (n)~~ n-1 or less;

(~~c~~d) selecting a number of reference wavelength bands; and

(~~d~~e) optically detecting with a detection system the intensity of only (i) said subset of said selected wavelength bands absorbed by said organic substance contained within said sample and (ii) said number of reference wavelength bands.

27. (Currently Amended) A method of measuring an amount of an organic substance contained within a biological sample, said organic substance having an infrared absorption spectrum which includes a set (n) of wavelength regions, wherein ~~each of~~ up to n-1 of said wavelength regions substantially correspond to an absorption band of said ~~absorption spectrum~~ organic substance and at least one of said wavelength regions corresponds to a reference wavelength band, comprising:

(a) calibrating a detection system with a reference sample;

(b) illuminating said biological sample with infrared electromagnetic radiation, wherein said infrared electromagnetic radiation includes (i) one or more wavelength bands of said infrared electromagnetic radiation resulting from filtering of said electromagnetic radiation which [[are]] is absorbed by said organic substance contained within said biological sample and (ii) one or more reference wavelength bands which are substantially not absorbed by said organic substance contained within said biological sample;

(~~b~~c) selecting a number said wavelength bands of said infrared electromagnetic radiation, wherein (i) each of said selected wavelength bands substantially corresponds to one of said wavelength regions and (ii) said number of said selected wavelength bands is a subset of (n);

(~~c~~d) selecting a number of reference wavelength bands;

(~~d~~e) optically detecting with [[a]] the detection system the intensity of said infrared electromagnetic radiation; and

(~~e~~f) processing with a mathematical model spectral data only from (i) said subset of said selected wavelength bands absorbed by said organic substance contained within said biological sample and (ii) said number of reference wavelength bands.

28. (Currently Amended) A method for determining a patient glucose level, comprising:

(1) obtaining a sample of a cell-free, blood-based body fluid in a sample container having a pre-defined measurement path;

(2) passing an incident infrared signal through said sample over said measurement path, wherein ~~(a) said incident signal comprises wavelengths in a measurement range of from 7 to 11 microns, (b)~~ said incident signal comprises at least two glucose absorbance bands each having a thickness of at least 140 nm in said measurement range and at least one reference band resulting from filtering of said incident infrared upon passing through said sample, and [[(c)]] said incident signal is modulated;

(3) optically detecting a ~~post-absorbance~~ signal comprising all three of said bands after said incident signal is absorbed by said sample using a detector configured to preferentially detect said modulated signal relative to unmodulated signals; and

(4) calculating glucose concentration in said sample from said post-absorbance signal.

29. (Original) The method of claim 28, wherein said body fluid is plasma, serum, or interstitial fluid.

30. (Original) The method of claim 29, wherein said body fluid is interstitial fluid.

31. (Original) The method of claim 28, wherein said sample is transported from a source location at or inside a patient body to a measurement location outside a patient body and said measurement container is present at said measurement location.

32. (Original) The method of claim 30, wherein said source location is at an implanted needle site, a subcutaneous membrane surface, or a skin surface subjected to ionoporation, microporation, or reverse ionophoresis.

33. (Original) The method of claim 30, wherein said interstitial fluid is filtered to remove proteins prior to passing said infrared signal through said sample.

34. (Currently Amended) The method of claim 33, ~~wherein~~ further comprising removing at least 80% of said proteins ~~are removed~~ prior to passing said infrared signal through said sample.

35. (Currently Amended) The method of claim 34, wherein the removing at least 80% of siad proteins comprises removing at least 96% of said proteins ~~are removed~~ prior to passing said infrared signal through said sample.

36. (Currently Amended) The method of claim 35, wherein the removing at least 96% of siad proteins comprises removing at least 98% of said proteins ~~are removed~~ prior to passing said infrared signal through said sample.

37. (Currently Amended) The method of claim 29, ~~wherein~~ further comprising passing said body fluid ~~has been passed~~ through a filter having a molecular weigh cut off in a range from 10 kD to 100 kD prior to passing said infrared signal through said sample.

38. (Currently Amended) The method of claim 29, wherein the passing said body fluid further comprises passing said body fluid ~~has been passed~~ through a filter having a molecular weigh cut off in a range from 10 kD to 40 kD prior to passing said infrared signal through said sample.

39. (Currently Amended) The method of claim 29, wherein the passing said body fluid further comprises passing said body fluid ~~has been passed~~ through a filter having a molecular weight cut off in a range from 10 kD to 25 kD prior to passing said infrared signal through said sample.

40. (Original) The method of claim 28, wherein said measurement path has a length in a range from 5 to 60 microns.

41. (Original) The method of claim 40, wherein said measurement path has a length in a range from 15 to 35 microns.

42. (Currently Amended) The method of claim 28, wherein said two glucose absorbance bands are a first and a second glucose absorbance band selected so that said first glucose absorbance band ~~has a first relative absorbance for~~ includes an absorption band of an interfering substance potentially present in said body fluid and said second glucose absorbance band ~~has a second relative absorbance for~~ includes a second absorbance band of said interfering substance, wherein ~~said first and second relative absorbances~~ absorbances of said interfering substance in said absorbance bands are different from each other.

43. (Currently Amended) The method of claim 42, wherein said incident signal further comprises a third glucose absorbance band selected so that said third glucose absorbance band ~~has (a) a third relative absorbance for~~ includes an absorbance band of said interfering

substance potentially present in said body ~~or (b) a fourth relative absorbance for a second interfering substance potentially present in said body~~.

44. (Original) The method of claim 42, wherein said interfering substance is lactic acid, a lactate salt, ascorbic acid, an ascorbate salt, mannitol, acetaminophen, ethanol, or a phosphate salt.

45. (Original) The method of claim 43, wherein said interfering substance is lactic acid or a lactate salt and said second interfering substance is ascorbic acid, an ascorbate salt, mannitol, acetaminophen, ethanol, or a phosphate salt.

46. (Original) The method of claim 33, wherein said two glucose bands are selected to be within or to overlap ranges selected from 1090 cm^{-1} to 1075 cm^{-1} [9.174 to 9.302 microns], 1175 cm^{-1} to 1137 cm^{-1} [8.511 to 8.795 microns], and 1180 cm^{-1} to 1170 cm^{-1} [8.475 to 8.547 microns]

47. (Original) The method of claim 33, wherein said two glucose bands are selected to be within or to overlap ranges selected from a band having a center wavelength of 7.930 microns and a bandwidth of 170 nm [7.845 to 8.015 microns], a band having a center wavelength of 9.320 microns and a bandwidth of 400 nm [9.120 to 9.520 microns], and a band having a center wavelength of 8.330 microns and a bandwidth of 140 nm [8.260 to 8.400 microns].

48. (Original) The method of claim 30, wherein said two glucose bands are selected to be within or to overlap ranges selected from a band having a center wavelength of 9.62 microns and a bandwidth of 200 nm, a band having a center wavelength of 9.22 microns and a bandwidth of 200 nm, a band having a center wavelength of 8.62 microns and a bandwidth of 200 nm, a band having a center wavelength of 9.02 microns and a bandwidth of 200 nm, and a band having a center wavelength of 7.33 microns and a bandwidth of 200 nm.

49. (Original) The method of claim 28, wherein said fluid is interstitial fluid, wherein said interstitial fluid is transported from a source location at or inside a patient body to a measurement location outside a patient body and said measurement container is present at said measurement location, wherein said interstitial fluid is passed through a filter having a molecular weight cut off in a range from 10 kD to 40 kD prior to passing said infrared signal through said sample, wherein said measurement path has a length in a range from 20 to 30 microns, and wherein said post-absorbance signal contains glucose absorbance date from a region from 8.3 to 10.3 microns.

50. (Currently Amended) The method of claim 28, wherein said modulated signal is modulated by varying ~~at least a part~~ one of the current, the voltage, or the frequency provided to the device that generates the incident infrared signal.

51. (Original) The method of claim 28 wherein said incident signal is modulated by the periodic insertion of an infrared blocking material an IR chopper.

52. (Original) The method of claim 50 further comprising performing a second modulation technique on the infrared signal.

53. (Original) The method of claim 51 further comprising performing a second modulation technique on the infrared signal.

54. (Original) The method of claim 50 wherein the modulated signal is the emitter output modulated at from 01. Hz to 10 Hz and the second modulation technique includes placing and removing a radiation absorbing material in the pathway of the infrared signal.

55. (Original) The method of claim 54 wherein the modulated signal is the emitter output modulated at 3 Hz.

56. (Currently Amended) The method of claim 28, wherein the sample [[cell]] container window material is selected from the group consisting of: barium fluoride, silicon and zinc selenide.

57. (Currently Amended) A method for determining a patient glucose level, comprising:

(1) calibrating a detector;

(2) obtaining a sample of a biological fluid in a sample ~~cell~~ having a path of defined path length for infrared absorption;

(~~2~~3) transmitting mid infrared radiation through said sample along said path, wherein (a) said incident signal comprises at least two glucose absorbance bands and at least one reference band, and (b) said transmitted radiation is modulated;

(~~3~~4) detecting, with an optical sensor, radiation from said two glucose absorbance bands each having a thickness of at least 140 nm and said reference band resulting from filtering radition after said radiation is absorbed by said sample using a detector configured to detect said modulated radiation and generating an electrical signal in response to detecting said modulated radiation; and

~~(4) generating an electrical signal in response to detecting said modulated radiation;~~

(5) receiving said electrical signal with a signal processor configured to process the electrical signal with a quantification algorithm; and

(6) processing said electrical signal with said quantification algorithm, thereby providing a measurement of glucose contained within the biological sample.

58. (Currently Amended) The method of claim 57, wherein said mid infrared radiation comprises wavelengths in a range of from ~~1200 cm^{-1} to 900 cm^{-1}~~ 7 to 11 microns.

59. (Original) The method of claim 57, wherein said biological fluid is plasma, serum, or capillary filtrate fluid.

60. (Original) The method of claim 59, wherein said biological fluid is capillary filtrate fluid.

61. (Original) The method of claim 60, wherein said sample of capillary filtrate fluid is transported from a subcutaneous location to said sample cell.

62. (Original) The method of claim 59, wherein said capillary filtrate fluid is filtered prior to passing said infrared signal through said sample.

63. (Original) The method of claim 62, wherein said capillary filtrate fluid is passed through an ultrafiltration membrane at a subcutaneous location of said patient.

64. (Original) The method of claim 63, wherein said ultrafiltration membrane passes organics having less than 3000 molecular weight.

65. (Original) The method of claim 64, wherein said membrane has a molecular weigh cut off of 30.

66. (Currently Amended) The method of claim 57, wherein said two glucose absorbance bands are selected so that a first glucose absorbance band ~~has a first absorbance ratio for~~ includes an absorbance band for an interfering substance potentially present in said biological fluid and said second glucose absorbance band [[has]] includes a second absorbance ~~ratio~~ band for said interfering substance.

67. (Original) The method of claim 66, wherein said transmitted mid infrared radiation further comprises a third glucose absorbance band.

68. (Original) The method of claim 66, wherein said interfering substance is lactate.

69. (Currently Amended) The method of claim 57, wherein said biological fluid is capillary filtrate fluid, said capillary filtrate fluid is transported from a subcutaneous location to said sample cell, said capillary filtrate fluid is passed through an ultrafiltration membrane that

allows passage of organics of less than 3000 molecular weight and wherein said detected radiation contains glucose absorbance bands in a region from ~~1200 cm $^{-1}$ to 950 cm $^{-1}$~~ 7 to 11 microns.

70-88. (canceled)